REMARKS

Claims 1-21 remain in the application, although claims 1-4 and 19-21 are withdrawn from prosecution.

Applicants respectfully request that the rejection of the claims presented be reconsidered and withdrawn in light of the amendments above and the discussion which follows and that the application be found in condition for immediate allowance.

Objections to the Specification

The disclosure has been objected to because the title of the invention is not descriptive. A new title that is clearly indicative of the invention to which the claims are directed has been indicated as being required.

In response, Applicants have amended the title to be indicative of the claimed invention. Applicants believe the new title "Apparatus Having Durable Storage" meets with the Examiner's approval and regulatory requirements.

Objections to the Claims

In numbered paragraph 6 of the Official Action, Claims 5-13 and 15-18 have been objected to on an informal basis. In subparagraphs (a) (1) - (3) specifically with regard to claim 5, "said durable data storage device," "said first data storage device," "said first and said durable data storage devices"; claims 8, 12, and 13, "said durable data storage device"; claim 9, "said durable data storage device" and "said first data storage device," Applicants assert that these informalities can be resolved by removing "electrically powered" from where these elements are first positively recited. Applicants respectfully assert that "electrically powered" is an inherent property which need not be positively recited.

In response, Applicants have amended claim 5 such that antecedent basis is formally provided for each of the aforementioned claims.

In subparagraph (a) (4) the Examiner objects to claim 15 with regard to "said low-power operation mode" and "the flow."

In response, Applicants point out that antecedent basis for "said low-power operation mode" is provided in the third element of claim 14 from which claim 15 depends. Applicants respectfully direct the Examiner to the paragraph which begins with "a processor..." in claim 14. With regard to "the flow," Applicants positively recite "a power supply controller...." Applicants respectfully assert that –flow-- is an inherent property of power and need not be positively recited. See MPEP 2173.05(e)

> For example, the limitation "the outer surface of said sphere" would not require an antecedent recitation that the sphere has an outer surface.

The Examiner raises a similar issue with in subparagraph (a)(5) with regard to "the supply." The very same inherency argument applies. Applicants have disclosed "a power supply controller." Applicants respectfully assert that a power supply controller inherently supplies power and therefore "the supply" is proper.

Also in subparagraphs (a)(5) - (7), the Examiner objects to in claim 16, "said first and said second data storage devices," "said first data storage device," and "said second data storage device"; in claim 17, "said first data storage device," and "said second data storage device"; and claim 18, "said second data storage device."

In response, Applicants have amended claim 16 in like manner to the amendments made with respect to claim 5. That is, the inherent property "electrically powered" has been removed from claim 16.

In subparagraph (b), with regard to claim 15, the Examiner objects to the use of non idiomatic English and Applicants agree that change is required.

In response, the word "of" has been deleted and the phrase now reads "which controls the flow of electrical power."

The objections made in subparagraph (c) with regard to claims 6, 7, 10 and 11 have been rectified by the amendments made to claim 5.

The above amendments arose out of non-statutory and informal bases are seen by Applicants as cosmetic, and as such, are not subject to the prosecution history estoppel imposed by *Festo*. For the record, Applicants point out that the Supreme Court in *Festo* noted that a cosmetic amendment would not narrow the patent's scope and thus would not raise the estoppel.

The 35 USC 112 ¶1 Rejections

Claims 5-13

Claims 5-13 stand rejected under 35 USC §112, first paragraph, as containing subject matter which was not described in the specification to enable the skilled practitioner to make and/or use the invention. In particular, Examiner asserts the originally filed limitation "suppressing electrical power" has the scope of meaning of removing some of the electrical power from the first storage device, while a proposed limitation "removing electrical power," which the Examiner asserts is enabled under 35 USC §112 first paragraph, has the scope of meaning of removing all the electrical power from the first data storage device. It is asserted that these two limitations have different scopes of meaning because the scope of "some" is not equal to the scope of "all". The Examiner cites Applicants' specification at page 5, lines 17-20, "the second mode is used to supply electric power only to the second data storage device."

In response, Applicants have amended the specification to coincide in scope with the claims as originally filed and to which scope Applicants are entitled. The pertinent section beginning on page 5 of Applicants specification on or about line 20 now reads:

. . . the second mode is used to supply an electric power ~~only~~ to the second data storage device while suppressing power to the first data storage device. . . .

Applicants foresaw the need to claim –suppression– rather than –removal– or any other term that implies "all" because, although the first storage device is in an off state, it is possible that the device may still be drawing some minimal amount of power. Applicants intended to cover the case where a potential infringer argues that because they measure 5 nanoamps and/or 30 millivolts at the first data storage device that they, therefore, do not literally infringe the claim.

Persons of ordinary skill in the computer art are aware that any device in an off state may draw some minimal power nevertheless. This is always the case when semiconductors are used because leakage currents are inherent to semiconductors even when they are "fully off." Computer simulation models for semiconductor devices nearly always have a parallel resistor. Also, it is well-known, that semiconductors when switched to output 0 V never reach 0 V and instead are only able to reach a saturation voltage which is characteristic of the device. Further, persons of ordinary skill in the computer art are also aware that an off-state device may draw some minimal power for reasons which pertain to system design, for example, in states such as the suspend and hibernation modes described in Applicants specification. It is foreseeable that these states may someday be applied to storage devices themselves.

As the specification has been made to conform to the claims in scope, and as the claims are of original scope and considered part of the specification as filed, Applicants respectfully assert that no new matter has been introduced by the present amendment. Further, as rationale has been given as to why a person of ordinary skill in the art are familiar with off states which draw minimal power, and therefore know how to make and or use the invention, Applicants respectfully request reconsideration and withdrawal of the rejection.

Claims 5-13, second rejection

Claims 5-13 also stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims are asserted to contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Examiner points to independent claim 5, specifically to the limitation,

> . . . a controller which controls access to said durable data storage device and which controls the flow of electrical power to said first and said durable data storage devices . . .

and asserts that as to this limitation that because there is no teaching of such a controller which controls both: (1) access to said durable data storage device (such as a RAM memory controller controlling access to RAM), and which also controls, (2) the flow of electrical power to said first and said durable data storage devices (such as a power controller which controls power to a hard drive and RAM). The disclosure taken as a whole, the Examiner asserts, fails to teach any such controller limitation having this scope of coverage for independent claim 5.

As an initial matter with respect to the Examiner's point (1) above, access to the durable data storage device, MRAM 14, is through the external memory controller 16 and not internal memory controller 15. Applicants shall assume that the Examiner meant external controller 16 and not RAM controller 15. Nevertheless, the amendment made below and the rationale presented by Applicants apply in either case.

In response to the Examiner's rejection, Applicants have amended the specification to be commensurate in scope with the claims as originally filed. Applicants have added the following paragraph to the specification.

> . . . As is well-known in the art, controllers 15,16, 18, 24, and 27 may be implemented as separate LSI parts, or as a single VLSI part. . . .

Applicants assert that it is well-known in the art that the level of integration of semiconductor devices is arbitrary. The choice as to whether functions are implemented in discrete logic, low-level integration, large-scale integration (LSI), or very large-scale integration (VLSI) is and has been for decades an arbitrary choice in a designer's Arsenal of design trade-offs. Accordingly, a person of ordinary skill in the art would know how to make and use the invention by either implementing controller 16 and controller 27 as separate controllers or as a single controller as claimed.

Applicants have generically claimed, in the application as originally filed, the functions of two controllers in a single controller. Applicants have amended the specification to correspond to the scope of the originally filed claims. Thus, Applicants respectfully assert that no new matter has been introduced as a result of the above amendment.

As the specification corresponds in scope with the claims, Applicants request reconsideration, withdrawal of the rejection, and allowance of claims 5-13.

For the purposes of argument, should the Examiner find flaw with any of the above, or should any of the above be found to be unpersuasive, Applicants additionally argue that the Examiner has failed to make a prima facie case of non enablement with regards to claims 5-13 at least because one of ordinary skill in the art would know that logic can be implemented as separate LSI parts or as a single VLSI part as presented above.

There is a strong presumption that an adequate written description of the claimed invention is present when the application is filed. *In re Wertheim*, 541 F.2d 257, 263, 191 USPQ 90, 97 (CCPA 1976) ("we are of the opinion that the PTO has the initial burden of presenting evidence or reasons why persons skilled in the art would not recognize in the disclosure a description of the invention defined by the claims"). This

In re Wertheim presumption applies here because these issues are supported by claims as originally filed. It is Applicants position that, in order to meet the initial burden according to *In re Wertheim*, the Examiner would have to show that a person of ordinary skill in the art at the time of the invention would not know that the various functions can be combined into a larger chip.

The enablement requirement is viewed from the perspective of one of ordinary skill in the art. The specification "need only be reasonable with respect to the art involved; they need not inform the layman nor disclose what the skilled already possess. They need not describe the conventional .... The intricacies need not be detailed ad absurdum" *General Elect. V. Brenner, 159 USPQ 335, 337 (DC Cir 1968)(citations omitted).* The Federal Circuit has stated the following: "The question is wether the disclosure is sufficient to enable those skilled in the art to practice the claimed invention, hence the specification need not disclose what is well known in the art." *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick co. 221 USPQ 481, 489 (Fed. Cir. 1984)(citations omitted).* The Federal Circuit has also stated: " A patent need not teach, and preferable omits, what is well known in the art. Spectra-Physics v. Coherent Inc. 3 USPQ 2d 1737, 1743 (Fed. Cir. 1987). Applicants respectfully assert that they have enabled one of skill in the art to make and use the claimed invention.

Applicants assert that a person of ordinary skill in the art given the specification could produce the claimed invention without undue experimentation. Therefore, Applicants' respectfully request withdrawal of the 35 USC §112, first paragraph rejection.

Claims 16-18

Claims 16-18 stand rejected under 35 USC §112, first paragraph, as containing subject matter which was not described in the specification to enable the skilled practitioner to make and/or use the invention. In particular, the Examiner asserts that there is no teaching that such a power supply controller receives the indicated data read/write request from the request receiver and then enables the reading/writing of data to the claimed storage device in response to the data read/write request, but the instant disclosure teaches only the functionality that the power supply controller controls the application of power to such storage device. It is asserted that the only element in the instant application which enables reading/writing of data to the claimed storage device is the memory controller of that device.

In response, Applicants have amended the claims 16 accordingly. As amended, the pertinent element of claims 16 now reads:

> . . . said power supply controller maintains said first data storage device in a powered off state and changes the power state of said second data storage device to the powered on state in response to the data read/write request.
>
> . . .

Applicants believe that the amendment made to claim 16 is not a narrowing amendment which would give rise to the limitations imposed by *Festo* because, in order to be enabled for reading and writing of data, the device must be powered on. The application of power is therefore seen as a broader limitation then the specific limitation to enable the reading and writing of data -- a limitation which was removed from the claim.

Applicants believe claims 16 through 18, as amended, are in allowable condition and respectfully request the rejection be withdrawn and for these claims to be passed to allowance.

The 35 USC 112 ¶2 Rejections

Claims 14 and 15

Claims 14 and 15 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the invention. For the specific language ". . . wherein said first and said second data storage devices are used as external storage for storing external data . . ." it is asserted that it is not clear whether the scope of the limitation includes the first and second data storage devices to be external to the computer apparatus since the language "are used as external storage" appears to suggest that the data storage devices are external to the computer apparatus, however, the inclusive term "comprising" suggests that these data storage devices are internal to the computer apparatus, therefore, the existing language leads to contradictory suggestions or interpretations of the scope of the claim language, thus making one of ordinary skill unable to determine the intended scope of coverage.

In response, Applicants have amended claim 14 to address the Examiner's rejection and to further clarify and more distinctly claim Applicants' invention. In particular, Applicants request that the Examiner take specific note of Applicants' exclusion of the word "external" in the newly amended subject claims. Therefore, claims 14 and 15 are believed to be in condition for immediate allowance. By these amendments, Applicants assert that the scope of the affected claims have not been narrowed in any respect.

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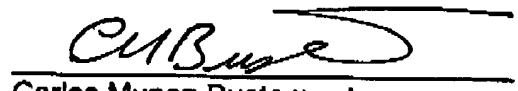
Early and Favorable Notice of Allowance Requested

By each and all of the aforementioned and entered positions, Applicants assert that all claims stand ready for allowance as to proper form and supporting basis, and as all rejections have been traversed or rendered moot.

Applicants therefore request the Examiner remove each and all of the rejections and\or objections, and respectfully request entry of the Amendment and reconsideration of all Claims, as amended, hereunder. Applicants request an early and favorable action on the present Application and a timely Notice of Allowance.

The Examiner is invited to contact the undersigned for all issues of this Application at the telephone number and\or email address indicated below, particularly for matters that may be timely handled.

Respectfully Submitted,



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